

EXHIBIT "A"

138 (Currently Amended)

A method of establishing an equine artificial insemination sample for equine artificial insemination comprising the steps of:

- a. obtaining equine sperm cells from a male of a species of equine mammal;
- b. staining said equine sperm cells to allow differentiation based upon a sex characteristic;
- c. establishing a cell source which introduces said equine sperm cells which have been stained into a sheath fluid;
- d. forming droplets in said sheath fluid;
- e. entraining said equine sperm cells which have been stained in said droplets;
- f. differentiating between said equine sperm cells entrained in said droplets based upon said sex characteristic;
- g. separating said droplets based upon said sex characteristic of said equine sperm cells entrained at a rate of at least nine hundred viable equine sperm cells per second;
- h. establishing a skim milk solution into which said droplets separated based upon said sex characteristic of said equine sperm cells entrained are collected;
- i. collecting viable equine sperm cells separated based upon said sex characteristic in said skim milk solution;
- j. establishing an equine artificial insemination sample containing at least some of said viable equine sperm cells separated based upon said sex characteristic which are capable of fertilizing at least one egg within a female of said species of equine mammal at success levels selected from the group consisting of at least 90%, at least 81%, at least 75%, at least 65%, at least 60%, at least 57%, at least 40%, at least 35%, and at least 30% of a typical unsorted equine artificial insemination dosage.